



PTO/SB/08a/b (08-03)

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Substitute for form 1449A/B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)				Complete If Known	
				Application Number	10/821812
				Filing Date	April 8, 2004
				First Named Inventor	Raanan A. Miller
				Art Unit	2881
Examiner Name	Not Yet Assigned				
Sheet	1	of	4	Attorney Docket Number	SION-P01-001

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
cmg	A1	2,615,135	10/21/52	Glenn, Jr., W.E.	
	A2	2,818,507	12/31/57	Britten, R.J.	
	A3	2,919,348	12/29/59	A. Bierman	
	A4	3,511,986	05/12/70	P.M. Llewellyn	
	A5	3,621,240	11/15/71	Cohen, et al.	
	A6	3,931,589	01/06/76	Aisenberg, et al.	
	A7	4,019,989	04/26/77	Hazewindus, et al.	
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	A11	4,315,153	02/09/82	Vahrenkamp	
	A12	4,517,462	05/14/85	Boyer, et al.	
	A13	4,761,545	08/02/88	Marshall, et al.	
	A14	5,218,203	June-93	Eisele, et al.	
	A15	5,298,745	03/29/94	Keman, et al.	
	A16	5,420,424	05/30/95	Carnahan, et al.	
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	A19	5,508,204	04/16/96	Norman	
	A20	5,536,939	07/16/96	Freidhoff, et al.	
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Examiner Signature	cm. el. shammaa	Date Considered	3.16.06
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cme	A44	US 2002/0134932 A1	9/26/02	Guevremont et al.	
	A45	US 2003/0020012 A1	1/30/03	Guevremont et al.	
	A46	US 2003/0038235 A1	2/27/03	Guevremont et al.	
	A 47	US 2002/0070338 A1	6/13/02	Loboda	

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		Country Code ³ -Number ⁴ -Kind Code ⁶ (if known)				
cme <						

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NON PATENT LITERATURE DOCUMENTS				
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me	C1	"A Micromachined Field Driven Radio Frequency-Ion Mobility Spectrometer for Trace Level Chemical Detection," A Draper Laboratory Proposal Against the "Advanced Cross-Enterprise Technology Development for NASA Missions," Solicitation, NASA NRA 99-OSS-05.		
	C2	BARNETT, D.A. et al., "Isotope Separation Using High-Field Asymmetric Waveform Ion Mobility Spectrometry," Nuclear Instruments & Methods in Physics Research (2000), pp 179-185, 450(1).		
	C3	BASILE, F., "A Gas Sample Pre-concentration Device Based on Solid Phase Microextraction (SPME) and Temperature Programmed Desorption (TPD)," Instrumentation Sci. Tech., (2003), pp 155-164, 31(2).		
	C4	BURYAKOV, I.A. et al., "A New Method of Separation of Multi-Atomic Ions by Mobility at Atmospheric Pressure Using a High-Frequency Amplitude-Asymmetric Strong Electric Field," International Journal of Mass Spectrometry and Ion Processes (1993), pp 143-148, 128.		
	C5	BURYAKOV, I.A. et al., "Drift Spectrometer for the Control of Amine Traces in the Atmosphere," J. Analytical Chem., (1993), pp 156-165, 48(1).		
	C6	BURYAKOV, I.A. et al., "Separation Ions According to Mobility in a Strong ac electric Field," Sov. Tech. Phs. Lett. (1991), pp 446-447, 17(6).		
	C7	BURYAKOV, I.A. et al., Device and Method For Gas Electrophoresis, Chemical Analysis fo Environment, edit. Prof. V.V. Malakhov, Novosibirsk; Nauka (1991), pp 113-127.		
	C8	CARNAHAN, B. et al., "Field Ion Spectrometry - A New Analytical Technology for Trace Gas Analysis," ISA, (1996), pp 87-96, 51(1).		
	C9	CARNAHAN, B. et al., "Field Ion Spectrometry - A New Technology for Cocaine and Heroin Detection," SPIE, (1997), pp 106-119, 2937.		
	C10	GUEVREMONT, R. and PURVES, R., "High Field Asymmetric Waveform Ion Mobility Spectrometry-Mass Spectrometry: An Investigation of Leucine Enkephalin Ions Produced by Electrospray Ionization," J. Am. Soc. Mass. Spectrom., (1999), pp 492-501, 10.		
	C11	GUEVREMONT, R. et al., "Calculation of Ion Mobilities From Electrospray Ionization High Field Asymmetric Waveform Ion Mobility Spectrometry Mass Spectrometry," Journal of Chemical Physics, (2001), pp 10270-10277, 114(23).		
	C12	GUEVREMONT, R. et al., "Atmospheric Pressure Ion Focusing in a High-Field Asymmetric Waveform Ion Mobility Spectrometer," Review of Scientific Instruments, (1999), pp 1370-1383, 70(2).		
	C13	HANDY, R. et al., "Determination of nanomolar levels of perchlorate in water by ESI-FAIMS-MS," JAAS (2000), pp 907-911, 15		
	C14	KRYLOV, E.V., "A Method of Reducing Diffusion Losses in a Drift Spectrometer," Technical Physics, (1999), pp 113-16, 4d(1).		
	C15	KRYLOV, E.V., "Pulses of Special Shapes Formed on a Capacitive Load," Instruments and Experimental Techniques, (1997), pp 628, 40(5).		
	C16	MILLER, R.A. et al., "A MEMS Radio-Frequency Ion Mobility Spectrometer for Chemical Agent Detection," (June 2000) Proceedings of the 2000 Solid State Sensors and Actuators Workshop, Hilton Head, SC.		
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		Breath," Analytical Biochemistry, (1997), pp 272-278, 247.	
me	C19	PILZECKER, P. et al., "On-Site Investigations of Gas Insulated Substations Using Ion Mobility Spectrometry for Remote Sensing of SF6 Decomposition," IEEE, (2000), pp 400-403.	
	C20	RIEGNER, D.E. et al., "Qualitative Evaluation of Field Ion Spectrometry for Chemical Warfare Agent Detection," Proceedings of the ASMS Conference on Mass Spectrometry and Allied Topics (June, 1997), pp 473A-473B.	
	C21	SCHNEIDER, A. et al., "High Sensitivity GC-FIS for Simultaneous Detection of Chemical Warfare Agents," Mine Safety Appliances Co., Pittsburgh, PA, USA, (2000), AT-Process, pp 124-136, 5(3,4), CODEN: APJCFR ISSN: 1077-419X..	
	C22	SHUTE, L.A. et al., "Curie-point Pyrolysis Mass Spectrometry Applied to Characterization and Identification of Selected Bacillus Species," J. General Micro., (JGMIAN) (1984), pp 343-355, 130(2).	
✓	C23	EICEMAN, et al., "Miniature radio-frequency mobility analyzer as a gas chromatographic detector for oxygen-containing volatile organic compounds, pheromones and other insect attractants," J. Chrom., pp 205-217, 917 (2001).	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English language Translation is attached.

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		Number-Kind Code ² (if known)			
me	AA	US-2003/0052263-A1	03-20-2003	Kaufman et al.	
	AB	US-2003/0132380-A1	07-17-2003	Miller et al.	
	AC	US-6,639,212	10-28-2003	Guevremont	
	AD	US-6,653,627	11-25-2003	Guevremont	
	AE	US-6,690,004	02-10-2004	Miller et al.	
	AF	US-6,703,609	03-09-2004	Guevremont	
	AG	US-6,713,758	03-30-2004	Guevremont	
	AH	US-2004/0094704-A1	05-20-2004	Miller et al.	
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	AK	US-6,774,360	08-10-2004	Guevremont	
	AL	US-6,787,765	09-07-2004	Guevremont	
	AM	US-6,799,355	10-05-2004	Guevremont	
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me	BA	WO-01/69217 A2	09-20-2001	National Research Council Canada	

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me	CA	Beverly, M.B. et al., "A Rapid Approach for the Detection of Dipicolinic Acid in Bacterial Spores Using Pyrolysis/Mass Spectrometry," Rapid Communications in Mass Spectrometry, Vo. 10, 455-458 (1996).	
	CB	Dworzanski, J.P. et al., "Field-Portable, Automated Pyrolysis-GC/IMS System for Rapid Biomarker Detection in Aerosols: A Feasibility Study," Field Analytical Chemistry and Technology, Vol. 1, No. 5, 295-305, (1997).	
	CC	Krylov, E.V., "Comparison of the Planar and Coaxial Field Asymmetrical Waveform Ion Mobility Spectrometer (FAIMS)," International Journal of Mass Spectrometry, 225, (2003) pp. 39-51.	
	CD	Krylova, N. et al., "Effect of Moisture on the Field Dependence of Mobility for Gas-Phase Ions of Organophosphorus compounds at Atmospheric Pressure with Field Asymmetric Ion Mobility Spectrometry," J. Phys. Chem. A, Vol. 107, 3648-3654.	
Examiner Signature	m. el. Hamman		Date Considered
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CME	CE	Snyder, A.P., "Detection of the Picolinic Acid Biomarker in Bacillus Spores Using a Potentially Field-Portable Pyrolysis - Gas Chromatography - Ion Mobility Spectrometry System," Field Analytical Chemistry and Technology, Vol. 1, No. 1, pp. 49-58 (1996).	
↓	CF	Thornton, S.N. et al., "Feasibility of Detecting Dipicolinic Acid in Bacillus Spores Using a Handheld IMS Device with Pyrolysis GC," Proceedings of the 1994 ERDEC Scientific Conference on Chemical and Biological Defense Research, November 1994, Aberdeen Proving Grounds, MD, 1996, pp. 601-607.	
↓	CG	Thornton, S.N. et al., "Pyrolysis-Gas Chromatography/Ion Mobility Spectrometry Detection of the Dipicolinic Acid Biomarker in Bacillus Subtilis Spores During Field Bioaerosol Releases," Field analytical Methods for Hazardous Wastes and Toxic Chemicals: Proceedings of a Specialty Conference, January 1997, Las Vegas, NV.	

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